112 (r) Regulated Chemicals

Toxics

Regulated Substance	*CAS #*	*TQ*
Acrolein	107-02-8	5,000
Acrylonitrile	107-13-1	20,000
Acrylyl chloride	814-68-6	5,000
Allyl alcohol	107-18-6	15,000
Allylamine	107-11-9	10,000
Ammonia (anhydrous)	7664-41-7	10,000
Ammonia (>= conc 20%)	7664-41-7	20,000
Arsenous trichloride	7784-34-1	15,000
Arsine	7784-42-1	1,000
Boron trichloride	10294-34-5	5,000
Boron trifluoride	7637-07-2	5,000
Boron trifluoride compound with methyl ether (1:1)	353-42-4	15,000
Bromine	7726-95-6	10,000
Carbon disulfide	75-15-0	20,000
Chlorine	7782-50-5	2,500
Chlorine dioxide	10049-04-4	1,000
Chloroform	67-66-3	20,000
Chloromethyl ether	542-88-1	1,000
Chloromethyl methyl ether	107-30-2	5,000
Crotonaldehyde	4170-30-3	20,000
Crotonaldehyde, (E)	123-73-9	20,000
Cyanogen chloride ((CN)Cl)	506-77-4	10,000
Cyclohexylamine	108-91-8	15,000
Diborane	19287-45-7	2,500
Dimethyldichlorosilane	75-78-5	5,000
1,1-Dimethyl hydrazine	57-14-7	15,000
Epichlorohydrin	106-89-8	20,000
Ethylenediamine	107-15-3	20,000
Ethyleneimine	151-56-4	10,000
Ethylene oxide	75-21-8	10,000
Fluorine	7782-41-4	1,000
Formaldehyde (solution)	50-00-0	15,000
Furan	110-00-9	5,000
Hydrazine	302-01-2	15,000
Hydrochloric acid (conc 37% or greater)	7647-01-0	15,000
Hydrocyanic acid	74-90-8	2,500
Hydrogen chloride (anhydrous)	7647-01-0	5,000
Hydrogen fluoride (anhydrous)/Hydrofluoric acid (conc. 50% or greater)	7664-39-3	1,000
Hydrogen selenide	7783-07-5	500
Hydrogen sulfide	7783-06-4	10,000
Iron, pentacarbonyl-	13463-40-6	2,500
Isobutyronitrile	78-82-0	20,000
Isopropyl chloroformate	108-23-6	15,000
Methacrylonitrile	126-98-7	10,000
Methyl chloride	74-87-3	10,000
Methyl chloroformate	79-22-1	5,000
Methyl hydrazine	60-34-4	15,000
Methyl isocyanate	624-83-9	10,000
Methyl mercaptan	74-93-1	10,000
Methyl thiocyanate	556-64-9	20,000
Methyltrichlorosilane	75-79-6	5,000

Flammables (TQ=10,000)*

Regulated Substance	*CAS #*
Acetaldehyde	75-07-0
Acetylene	74-86-2
Bromotrifluoroethylene	598-73-2
1,3-Butadiene	106-99-0
Butane	106-97-8
1-Butene	106-98-9
2-Butene	107-01-7
Butene	25167-67-3
2-Butene-cis	590-18-1
2-Butene-trans	624-64-6
Carbon oxysulfide	463-58-1
Chlorine monoxide	7791-21-1
1-Chloropropylene	590-21-6
2-Chloropropylene	557-98-2
Cyanogen	460-19-5
Cyclopropane	75-19-4
Dichlorosilane	4109-96-0
Difluoroethane	75-37-6
Dimethylamine	124-40-3
2,2-Dimethylpropane	463-82-1
Ethane	74-84-0
Ethyl acetylene	107-00-6
Ethylamine	75-04-7
Ethyl chloride	75-00-3
Ethyl ether	60-29-7
Ethyl mercaptan	75-08-1
Ethyl nitrite	109-95-5
Ethylene	74-85-1
Hydrogen	1333-74-0
Isobutane	75-28-5
Isopentane	78-78-4
Isoprene	78-79-5
Isopropyl chloride	75-29-6
Isopropylamine	75-31-0
Methane	74-82-8
Methylamine	74-89-5
2-Methyl-1-butene	563-46-2
3-Methyl-1-butene	563-45-1
Methyl ether	115-10-6
Methyl formate	107-31-3
2-Methylpropene	115-11-7
1,3-Pentadiene	504-60-9
Pentane	109-66-0
1-Pentene	109-67-1
2-Pentene, (E)-	646-04-8
2-Pentene, (Z)-	627-20-3
1,2-Propadiene	463-49-0
Propane	74-98-6
Propylene	115-07-1
1-Propyne	74-99-7
Silane	7803-62-5
Tetrafluoroethylene	116-14-3
Tetramethylsilane	75-76-3
Trichlorosilane	10025-78-2
Trifluorochloroethylene	79-38-9

112 (r) Regulated Chemicals

Toxics

Regulated Substance	*CAS #*	*TQ*
Nickel carbonyl	13463-39-3	1,000
Nitric acid (>= conc 80%)	7697-37-2	15,000
Nitric oxide	10102-43-9	10,000
Oleum (fuming sulfuric acid)	8014-95-7	10,000
Peracetic acid	79-21-0	10,000
Perchloromethyl mercaptan	594-42-3	10,000
Phosgene	75-44-5	500
Phosphine	7803-51-2	5,000
Phosphorus oxychloride	10025-87-3	5,000
Phosphorus trichloride	7719-12-2	15,000
Piperidine	110-89-4	15,000
Propyleneimine	75-55-8	10,000
Propylene oxide	75-56-9	10,000
Sulfur dioxide (anhydrous)	7446-09-5	5,000
Sulfur tetrafluoride	7783-60-0	2,500
Sulfur trioxide	7446-11-9	10,000
Tetramethyllead	75-74-1	10,000
Tetranitromethane	509-14-8	10,000
Titanium tetrachloride	7550-45-0	2,500
Toluene-2,4-diisocyanate	584-84-9	10,000
Toluene-2,6-diisocyanate	91-08-7	10,000
Toluene diisocyanate (unspecified isomers)	26471-62-5	10,000
Trimethylchlorosilane	75-77-4	10,000
Vinyl acetate monomer	108-05-4	15,000

Flammables (TQ=10,000)*

Regulated Substance	*CAS #*
Trimethylamine	75-50-3
Vinyl acetylene	689-97-4
Vinyl chloride	75-01-4
Vinyl ethyl ether	109-92-2
Vinyl fluoride	75-02-5
Vinylidene chloride	75-35-4
Vinylidene fluoride	75-38-7
Vinyl methyl ether	107-25-5

*** See Chemical Safety Information, Site Security and Fuels Regulatory Relief Act of 1999 on inside panel**

Contacts

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Protecting Your Community From Chemical Hazards

HazMat teams, Fire Departments, Local Emergency Management Agencies, and Local Emergency Planning Committees

Risk Management Program (RMP) in North Carolina

Section 112(r) of the 1990 Clean Air Act Amendments

NORTH CAROLINA
Chemical Accident Prevention Program

Departments of:
Agriculture & Consumer Services
Crime Control & Public Safety
Environment & Natural Resources

North Carolina Risk Management Program

Mission

To promote chemical accidental release prevention measures and reduce the impact of a release on the environment, property and public health through safety programs, emergency preparedness and public access to chemical information.

Section 112(r) of the 1990 Clean Air Act Amendments

In 1990, Congress amended the Clean Air Act, Section 112(r), requiring facilities using regulated substances above threshold quantities in a single process (i.e. interconnected or co-located containers) to implement a program to prevent and respond to accidental releases. By June 21, 1999, covered facilities were required to submit a Risk Management Plan (RMP) for each chemical process outlining regulated chemicals, analysis of the consequences of releases traveling beyond the facilities' boundaries, five-year accident history, prevention program and emergency response plan.

Although the primary responsibility for accident prevention lies with the facility, local government agencies, emergency responders and Local Emergency Planning Committees (LEPC) play an important role in ensuring the health and safety of their community by coordinating emergency response and preparing the community for potential consequences of accidental releases. This brochure outlines the requirements of the Risk Management Program and highlights opportunities to use information in RMPs to increase chemical safety and preparedness and protect your community.

Additional Resources

North Carolina Department of Environment and Natural Resources, Division of Air Quality. Brochure: Do You Need a RMP?

U. S. Environmental Protection Agency, Chemical Emergency Preparedness and Prevention Office. Numerous resources available online: http://www.epa.gov/ceppo

U. S. Environmental Protection Agency, Chemical Emergency Preparedness and Prevention Office. Database: Submitted Risk Management Plans. http://www.epa.gov:9966/srmpdcd/owa/rmp_cmnc$.startup

U. S. Environmental Protection Agency, Chemical Emergency Preparedness and Prevention Office (1999). RMPs Are on the Way! How LEPCs and Other Local Agencies Can Include Information from Risk Management Plans in Their Ongoing Work. Available online at: http://www.epa.gov/swercepp/pubs/lepc-rmp.pdf

Risk Management Program

Program Levels

Covered facilities may fall under one of three prevention programs based on the processes' potential for impacting the public and the facilities' actions to limit releases. Program Level One requires the least effort, while Program Level Three is associated with the greatest risk and increased prevention efforts.

Program Level Requirements

Program 1:

- Assess worst case scenario of an accidental release
- Report 5-year accident history
- Coordinate emergency response plan with LEPC/local responders

Programs 2 & 3:

- Assess worst case and alternative (more likely) scenarios of accidental releases
- Report 5-year accident history
- Develop and document management committment to accident prevention program
- Establish prevention program (Program 3 is more comprehensive)
- Develop emergency response plan and coordinate with LEPC/local responders

Offsite Consequence Analysis (OCA)

Covered facilities must evaluate the potential impact of accidental releases on the environment and public beyond the boundaries of the facility. Analysis estimates the amount of chemical released, distance chemical may travel before dispersing, and number of buildings, residences and sensitive environmental areas impacted.

Program 1:

- Assess the consequences of the largest quantity of regulated chemical resulting in greatest impact offsite (worst-case scenario).

In addition, Programs 2 & 3 are required to:

- Assess the worst case scenario and incidents that are more likely to occur than worst-case scenarios of each regulated toxic chemical and all regulated flammable chemicals (alternative scenarios).

Emergency Response

Regulated facilities must coordinate emergency response with the LEPC, local emergency management, emergency services or fire department.

Chemical Safety Information, Site Security and Fuels Regulatory Refief Act of 1999

This act exempted facilities using propane and other flammable substances as fuel or retail facilities holding substance for sale as fuel, and restricted public access to the Offsite Consequence Analysis (OCA) data of Risk Management Plans.

Using RMP Information

Coordination

- Coordinate emergency response for flammable substances with local fire department
- Ensure facilities' emergency plans are coordinated with community's plan
- Share chemical safety information with other local government agencies and environmental action groups

Awareness/Education

- Use RMP to promote chemical awareness in community
- Work with facilities to reduce chemical inventories on-site
- Present OCA information in schools to promote family emergency preparedness
- Host awareness events, such as "Public Safety Days" at local sporting events
- Assist smaller facilities by sharing information about "best practices"

Public Information

- Provide nearby residents with information on facilities
- Develop warning and notification system for residences and businesses within impact area
- Ensure that emergency responders have access to chemical information at regulated facilities

Preparedness

- Set priorities for response, protective actions and drills using OCA information
- Develop and distribute shelter-in-place and evacuation guides in impacted areas

Emergency Planning

- Include facilities' emergency plans for toxic substances in community response plan
- Incorporate OCA data into evacuation procedures
- Coordinate RMP and EPCRA information
- Ensure plan reflects updates from facilities' Risk Management Plans

Test Response

- Conduct exercise of community emergency plan using alternative scenario
- Use accident history as a guide for exercises
- Coordinate exercises with local and state hazardous materials responders, local police, fire, hospitals, schools, colleges, businesses and community action groups

Public Access to Offsite Consequence Analysis

EPA is setting up 50 reading rooms for the public to read, but not photocopy, OCA information. The public may also access certain OCA elements on the EPA website. To help the public learn about chemical hazards in their communities, EPA established a vulnerable zone indicator system. LEPCs, State Emergency Response Commissions, fire departments and other emergency response related agencies are encouraged to provide read-only access to OCA information for local facilities.